REMARKS

In response to the Office Action of September 26, 2005, Applicant takes note that the Examiner has shown only claims 1-18 as pending. Applicant directs the Examiner's attention to Applicant's response dated July 19, 2005, which was filed with a proper Request for Continuing Examination (RCE). In that response, Applicant amended claims 1 and 11 and added new claims 19 and 20. New independent claim 19 recites *a method of implementing a software upgrade for a control device.* Applicant notes that claim 1 recites *a method for modifying processing on at least one control device.* Applicant respectfully suggests that implementing a software upgrade and modifying processing recite embodiments of the same invention, as would be recognized by one of skill in the art. More particularly, the transferring, storing and redirecting limitations of claims 1 and 19 recite similar features.

It is not clear from the Office Action if new claims 19 and 20 were inadvertently overlooked. Accordingly, Applicant again identifies claims 19 and 20 as (New) is the listing of claims. Applicant requests that the Examiner enter and consider new claims 19 and 20. At a minimum, Applicant requests that the Examiner acknowledge the claims and the disposition thereof.

Applicant's silence with regard to the Examiner's rejections of dependent claims constitutes a recognition by the Applicant that the rejections are moot based on Applicant's Remarks relative to the independent claim from which the dependent claims depend. Applicant reserves the option to further prosecute the same or similar claims in the present or a subsequent application. Upon entry of new claims 19 and 20, claims 1-20 are pending in the present application, of which claims 1, 11 and 19 are independent.

Claim Rejections - 35 U.S.C. § 103(a)

The Examiner rejected claims 1-18 under 35 U.S.C. § 103(a) as being unpatentable over Stevenson et al. (U.S. Patent No. 6,738,388) and Wadsworth (U.S. Patent. No. 6,067,407). However, in support of the rejection, the Examiner cites a reference to Soltis,

though the rejection (par. 2, page 2) itself does not include this reference and no further identification is provided by the Examiner. However, in order to move prosecution forward, Applicant's remarks in this Response will consider this reference as being the Soltis et al. (U.S. Patent. No. 6,493,804) reference cited in the Final Office Action dated April 20, 2005. If such is not the case, the Examiner is requested to issue a new Office Action and clarify the reference to Soltis.

As provided in Applicant's response dated July 19, 2005, independent claim 1 is directed to a method of modifying processing on at least one control device. In general, Applicant's independent claim 1 enables a download operation to be performed robustly. The download is performed by transferring data, as further described in Applicant's independent claim 1, and then storing the transferred data in an inactive memory area. By transferring during unscheduled communications periods and storing the data to an inactive area of the memory of the control device, any and all operations of the control device, which use active memory areas, are not affected while the transfer and storage occur. The control device microprocessor is directed to execute the stored data during an idle period of the microprocessor, thus achieving the installation of the downloaded data and so modifying the processing of the control device. In this way, it is possible to achieve the remote updating of, for example, control devices in large chemical plants, while allowing those control devices to continue their current operations. Neither Stevenson et al., Soltis et al. nor Wadsworth et al., alone or in combination, teach or suggest such a system.

Applicant's independent claim 1 includes transferring data *from a remote host device* to at least one control device during unscheduled communications periods and *without interrupting the operation of the control device.* In the Examiner's response to Applicant's arguments, the Examiner contends that the external function block described in Stevenson et al. (col. 17, line 66 to col. 18 line 5) can be interpreted as a remote device. While one can argue that any one of two separate devices in communication with each other can be considered remote relative to the other, this is not what claims 1 recites. Claim 1 recites a *remote host device* communicating with a *control device.* One of skill in the art would not

consider the external function block in Stevenson et al. to be a remote host device. Rather, the external function block is part of a field device, such as a sensor (col. 18, lines 15-17).

The Examiner further contends that Stevenson et al. discloses that communications between the actual function block and the shadow block occur automatically without intervention by the process control routine (col. 18, lines 63-66). It is unclear if the Examiner is contending that this reference discloses transferring data *during unscheduled communications periods and without interrupting the operation of the control device.* If this is the Examiner's contention, then Applicant notes that, in having communications occurring automatically without intervention by the control process routine, Stevenson et al. do not state nor imply that data is transferred during unscheduled communications periods. To the contrary, automatically occurring communications require scheduled communications.

Further, the fact that communications occur without intervention by the control process routine does not imply that the communication does not interrupt the operation of the control device. As stated in Applicant's response dated July 19, 2005, Stevenson et al. disclose configuring function blocks within devices by setting the function block mode to "out of service", so as to change values within the function block. (See col. 26, lines 11-20 and Fig. 10.) As the function block is "out of service", the device cannot perform its process control function using the function block and accordingly the operation of the device is interrupted. Accordingly Stevenson et al. do not teach transferring data for modifying processing of a control device without interrupting operation of the control device. In fact, Stevenson et al. teach that setting the function block mode to out of service is necessary to change values within the function block (col. 26, lines 18-20), thus teaching away from or against Applicant's method of *transferring data without interrupting operation*, as recited in claim 1.

The Examiner also contends that Stevenson et al. disclose transferring data from the host device to the control device during unscheduled communications periods without interrupting the operation of the control device in the rejection of claims 1, 11 and 15. Neither the Examiner's response to Applicant's arguments nor the rejection of claim 1

address Applicant's above remarks. Based on the above, Stevenson et al. does not teach or suggest transferring data *from a remote host device* to at least one control device during unscheduled communications periods and *without interrupting the operation of the control device*, as recited in claim 1. The Examiner does not cite, nor can Applicant find any reference in Soltis et al. or Wadsworth et al. that discloses such features. Since none of the references teach or suggest the method of claim 1 of *transferring data from a remote host device to the at least one control device during unscheduled communications periods and without interrupting operation of the at least one control device, the remote host device and the at least one control device being coupled through a Fieldbus communications network*, claim 1 is patentable over the references and Applicant respectfully request allowance of claim 1.

The Examiner acknowledges that Stevenson et al. does not describe redirecting at least one control instrument microprocessor during an idle period of the at least one control device. However, the Examiner contends that Soltis et al. discloses SCSI Mode and Mode select commands that allow access to and modification of a SCSI-defined Device Locks mode page on a storage device, which are used for configuring the device locks and that typically include several SCSI-defined pages of configuration data (col. 25, lines 21-31).

It is unclear from the cited reference, how Soltis et al. discloses redirecting a microprocessor during an idle period. In the Examiner's response to Applicant's arguments (par. 17, pages 7 and 8), the Examiner contends that since the commands are used for configuring several SCSI-defined pages of configuration data, one of skill in the art "interrupted [sic] the inactive memory as any storage device that has storing capability." As it stands, Applicant fails to understand the Examiner's contention. If the Examiner intends that one of skill in the art would interpret the inactive memory as any storage device that has storing capability, then this contention does not show a teaching of *redirecting at least one control instrument microprocessor during an idle period of the at least one control device.* Soltis et al. merely states that the SCSI Mode and Mode select commands allow access to and modification of a SCSI-defined Device Locks mode page on a storage device. There is

no teaching or suggestion in Soltis et al. that the commands redirect a microprocessor to perform the modification of the mode page during an idle period of a control device.

The Examiner does not cite, nor can Applicant find any reference in Wadsworth et al. that discloses such a feature. Since the Examiner acknowledges that Stevenson et al. does not teach or suggest this feature, then it follows that none of the references teach or suggest the method of claim 1 of *redirecting at least one control instrument microprocessor during an idle period of the at least one control device.* Accordingly, claim 1 is patentable over the references and Applicant again respectfully requests allowance of claim 1.

The Examiner acknowledges that neither Stevenson et al. nor Soltis et al. teach or suggest redirecting the microprocessor *to execute the stored data in the inactive memory area to modify the processing on the at least one control device*, as recited in claim 1. However, the Examiner contends that Wadsworth et al., in the same field of endeavor, disclose the capability of the MLID to retrieve and store data at indicated locations in the memory of the network interface controller (col. 11, lines 26-28) and that Enter data is used to modify the data values, to modify the process steps, to set break points for subsequent initiation of execution of the interactive debugger (col. 13, lines 26-29). Applicant agrees that debuggers such as that described in Wadsworth et al. can set break points in software and thus modify the execution of the software. However, such break points interrupt the software execution to perform dumps, run debug facilities, or the like at the set break points. Thus, Wadsworth et al. cannot be said to transfer data without interrupting operation.

Further, the Enter Data function operates within the debug routine. In preparing to debug a software program, or during the debug operation, an operator can use the Enter Data function to modify data values, set break points and the like. As noted, software execution is interrupted during the debug operation. Thus, the Enter Data function is incompatible with the method recited in claim 1.

Additionally, Applicant disagrees that Wadsworth et al. is in the same field of endeavor as is Stevenson et al., or as Applicant's method. Stevenson et al. describe a process controller, while Wadsworth et al. describe a remote diagnosis utility for software

routine debugging. Outside of a general relationship dealing with software and networks, Applicant fails to see the connection. Applicant requests that the Examiner provide additional clarification as to how the diagnosis utility of Wadsworth et al. has application to the process control network of Stevenson et al.

In summary, neither Stevenson el at., Soltis et al., nor Wadsworth et al., alone or in any combination, teach or suggest each and every feature of the method described by Applicant's independent claim 1. Thus, Applicant's independent claim 1 is allowable, and Applicant's dependent claims 2-10, which depend from independent claim 1, are also allowable at least by dependency.

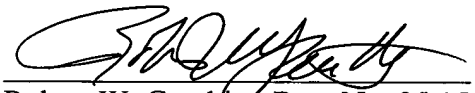
Applicant's independent claim 11 is a system claim that includes features similar to allowable independent claim 1. Applicant's independent claim 11 is therefore allowable for the reasons provided with respect to Applicant's independent claim 1. Thus, Applicant's claims 12-18, which depend from independent claim 11, are also allowable. New claims 19 and 20 more specifically recite a method of implementing a software upgrade for a control device. Claim 19 includes features similar to allowable independent claim 1 and is therefore allowable for the reasons provided with respect to Applicant's independent claim 1. New claim 20 depends from independent claim 19 and is also allowable at least by reason of dependency.

CONCLUSION

Applicant believes this Response to be fully responsive to the present Office Action. Thus, based on the foregoing Remarks, Applicant respectfully submits that this application is in condition for allowance. Accordingly, Applicant requests allowance of the application.

Applicant invites the Examiner to contact the Applicant's undersigned Attorney if any issues are deemed to remain prior to allowance.

Respectfully submitted,



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